# IEEE *Approved Draft* P802.11c/D6.1

# Information Technology—Telecommunications and information exchange between systems—Local area networks—Media access control (MAC) bridges—Supplement for support of IEEE 802.11

**Prepared by the LAN MAN Standards Committee of the IEEE Computer Society**

# IEEE Draft P802.11c/D6~~5~~.1

# ~~IS ISO/IEC 10038 : 1993 (IEEE 802.1D)~~ Information Technology - Telecommunications and information exchange between systems - Local area networks - Media access control (MAC) bridges - Supplement for support of~~by~~ IEEE 802.11

**Sponsor**

**LAN MAN Standards Committee**
**of the**
**IEEE Computer Society**

The purpose of this standard is to add the necessary information to IEEE Std. 802.1D to map the IEEE 802.11 MAC parameters onto 802.1D MAC parameters. The text revisions below are referenced to the 802.1~~p~~D/D~~8~~15 draft.

This draft expires on July 31~~June 30~~, 1998.

# IEEE Standards for Local and Metropolitan Area Networks:

# ~~IEEE Standard 802.1D)~~ Information Technology - Telecommunications and information exchange between systems - Local area networks - Media access control (MAC) bridges - Supplement for support ~~of~~by IEEE 802.11

## Support by IEEE 802.11 Wireless LANs

## Supplement to IEEE Draft Std. 802.1D

The purpose of this standard is to add the necessary information to IEEE Std. 802.1D to map the IEEE 802.11 MAC parameters onto 802.1D MAC parameters. The text revisions below are referenced to the 802.1D/D15 draft.

Editing instructions for incorporating the revisions defined by this supplement into the indicated subclauses of the base standard (802.1D/D15) are shown in ***bold italic*** type.

### 3.4 IEEE 802 Local Area Network (LAN)

***Page 21, line 40, insert the following between " 8802-9 (IS-LAN)" and "ISO/IEC 8802-12"***

", IEEE Std 802.11-1997"

### 2 References

***Page 19, line 38: add the following reference:***

IEEE Std 802.11-1997, IEEE Standard for Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications.

### 6. Support of the MAC service

***Page 38 : add a new subclause 6.5.7 as follows***

6.5.7 Support by IEEE Std 802.11 (Wireless LANs )

The wireless LAN access method is specified in IEEE Std 802.11-1997. Clause 7 of that standard specifies frame formats, Clause 9 specifies the medium access control sublayer function, and Clause 11 specifies the mandatory medium access control sublayer management function

A Bridge to an 802.11 LAN shall ~~may only~~ connect to an 802.11 Portal, which in turn connects to an 802.11 Distribution System. For the purposes of bridging, the service interface presented at the Portal is identical to the service interface presented at the 802.11 MAC SAP. An instance of an 802.11 Distribution System can~~may~~ be implemented from 802 LAN components. 802.11 STAs attach to the Distribution System via an 802.11 Access Point. A bridge shall not connect to an 802.11 Independent BSS. ~~Bridging to an 802.11 Independent BSS is not permitted.~~ For a description of the 802.11 architecture, see Clause 5 of IEEE Std 802.11-1997.

~~The wireless LAN access method is specified in IEEE Std 802.11-1997. Clause 7 of that standard specifies frame formats, Clause 9 specifies the medium access control sublayer function, and Clause 11 specifies the mandatory medium access control sublayer management function~~

On receipt of an M_UNITDATA.request primitive the portal constructs ~~and transmits a MAC frame~~ a MAC Service Data Unit and passes it to the MAC Data service for transmission, in accordance with the frame formats and procedures specified in IEEE Std. 802.11 clauses 6, 7, 9 and Annex C, using the parameters supplied as specified below.

On receipt of a valid MAC Service Data Unit ~~frame~~ (see IEEE 802.11 clauses 6, 7, 9 and Annex C), the portal generates an M_UNITDATA.indication primitive with parameter values derived from the frame fields as specified below.

The frame_type parameter only takes the value user_data_frame. When processing MSDU_from_LLC, the frame_type of user_data_frame shall~~must~~ be translated according to parameters specified in 7.1.3.1 of 802.11 and is explicitly encoded in MAC frames.

The mac_action parameter only takes the value request_with_no_response and is not explicitly encoded.

The destination_address parameter is encoded in ~~of the~~ MAC frames as the DA described in Table 4 of 7.2.2 of 802.11.

The source_address parameter is encoded in ~~the~~ MAC frames as the SA described in Table 4 of clause 7.2.2 of 802.11.

The mac_service_data_unitparameter is encoded in the Frame Body field (IEEE Std 802.11-1997, 7.1.3.5) of ~~the~~ MAC frames. The length of the MSDU shall~~must~~ be less than or equal to 2304 octets. The length is not encoded in ~~the~~ MAC frames, but is conveyed in the PHY headers.

The user_priority parameter is not encoded in ~~the~~ MAC ~~F~~frames. The user_priority parameter provided in an M_UNITDATA.indication primitive shall~~always~~ take~~s~~ the value of the Default_User_Priority parameter for the port through which the MAC Service Data Unit ~~frame~~ was received (see 6.4).

The frame_check_sequence parameter is encoded in the Frame Check Sequence (FCS) field of ~~the~~ MAC frames in accordance with IEEE Std 802.11-1997, 7.1.3.6 FCS.

The access_priority parameter is not encoded in ~~the~~ MAC frames.

No special action, above that specified in IEEE Std 802.12-1995, is required for the support of the MAC Internal Sublayer Service by the demand priority access method.

### 7.7.5 Mapping Priority

***In Table 7-3 on page 55, add a column for 802.11 that maps all priorities to zero (0).***

### 14.4.2.1.3 Outputs

***Item ( b ), page 232 line 35 : insert before "ISO 9314-2"***

"; IEEE Std 802.11"

# Annex A PICS Proforma

## A.5 Major capabilities and options

***Section 1, item (1a), page 292 line 16: insert the following item and renumber those following:***

1a.8 Wireless LAN IEEE 802.11